

Corrections

Cohen, Carolyn. 1998. *Biophys. J.* 74:532–533.

Due to an oversight, this article was not listed in the Table of Contents.

Jafri, M. Saleet, J. Jeremy Rice, and Raimond L. Winslow. 1998. *Biophys. J.* 74:1149–1168. Several errors occurred in the article. The corrected equations should read:

$$\frac{d[\text{Ca}^{2+}]_i}{dt} = B_i \left\{ J_{\text{leak}} + J_{\text{xfer}} - J_{\text{up}} - J_{\text{trpn}} - (I_{\text{Ca,b}} - 2I_{\text{NaCa}} + I_{\text{p(Ca)}}) \frac{A_{\text{cap}}}{2V_{\text{myo}}F} \right\}, \quad (13)$$

$$\frac{d[\text{Ca}^{2+}]_{\text{NSR}}}{dt} = \{J_{\text{up}} - J_{\text{leak}}\} \frac{V_{\text{myo}}}{V_{\text{NSR}}} - J_{\text{tr}} \frac{V_{\text{JSR}}}{V_{\text{NSR}}}. \quad (16)$$

$$\beta = 0.05e^{-(V+12)/13} \quad (18)$$

$$\frac{d[\text{Ca}^{2+}]_{\text{ss}}}{dt} = B_{\text{ss}} \left\{ J_{\text{rel}} \frac{V_{\text{JSR}}}{V_{\text{ss}}} - J_{\text{xfer}} \frac{V_{\text{myo}}}{V_{\text{ss}}} - (I_{\text{Ca}}) \frac{A_{\text{cap}}}{2V_{\text{myo}}F} \right\}. \quad (19)$$

$$I_{\text{Ca}} = \bar{P}_{\text{Ca}} V \{O + O_{\text{Ca}}\} 4 \frac{VF^2}{RT} \frac{0.001e^{2VF/RT} - 0.341[\text{Ca}]_o}{e^{2VF/RT} - 1}, \quad (37)$$

$$I_{\text{Ca,K}} = P'_{\text{K}} V \{O + O_{\text{Ca}}\} \frac{VF^2}{RT} \frac{[K^+]_i e^{2VF/RT} - [K^+]_o}{e^{2VF/RT} - 1}. \quad (38)$$

$$\frac{d[K^+]_i}{dt} = -(I_{\text{K}} + I_{\text{K}_1} + I_{\text{K}_P} + I_{\text{ns,K}} - 2I_{\text{NaK}} + I_{\text{Ca,K}}) \frac{A_{\text{cap}}}{V_{\text{myo}}F} \quad (45)$$

$$\frac{dP_{\text{C}_1}}{dt} = -k_a^+ [\text{Ca}^{2+}]_{\text{SS}}^n P_{\text{C}_1} + k_a^- P_{\text{O}_1} \quad (89)$$

$$\begin{aligned} \frac{dP_{\text{O}_1}}{dt} = & k_a^+ [\text{Ca}^{2+}]_{\text{SS}}^n P_{\text{C}_1} - k_a^- P_{\text{O}_1} - k_b^+ [\text{Ca}^{2+}]_{\text{SS}}^m P_{\text{O}_1} \\ & + k_b^- P_{\text{O}_2} - k_c^+ P_{\text{O}_1} + k_c^- P_{\text{C}_2} \end{aligned} \quad (90)$$

$$\frac{dP_{\text{O}_2}}{dt} = k_b^+ [\text{Ca}^{2+}]_{\text{SS}}^m P_{\text{O}_1} - k_b^- P_{\text{O}_2} \quad (91)$$

$$\frac{dP_{\text{C}_2}}{dt} = k_c^+ P_{\text{O}_1} - k_c^- P_{\text{C}_2} \quad (92)$$

In Table 4, b_1 should be replaced by a ; b_2 should be replaced by b ; \bar{P}_{Ca} equals $33.75 \times 10^{-4} \text{ cm s}^{-1}$.

In Table 5, k_{trpn}^+ equals $2.0 \times 10^7 \text{ M}^{-1} \text{ s}^{-1}$; k_{trpn}^+ equals $4.0 \times 10^7 \text{ M}^{-1} \text{ s}^{-1}$; k_{trpn} equals 40 s^{-1} .

In Table 7, $[\text{LTRPNCa}]$ is the concentration of Ca^{2+} bound low-affinity troponin binding sites and equals $6.349973 \text{ } \mu\text{M}$; $[\text{HTRPNCa}]$ is the concentration of Ca^{2+} bound high-affinity troponin binding sites and equals $135.9813 \text{ } \mu\text{M}$.

In the last line of the “Methods” section, the stimulating current should be $0.1 \text{ mA } \mu\text{F}^{-1}$ ($100 \text{ } \mu\text{A } \mu\text{F}^{-1}$). This list of errors is available from the authors at <http://www.bme.jhu.edu/~jafri/models/cardca-errors.ps>. A complete set of the model equations is available at <http://www.bme.jhu.edu/~jafri/models/cardca-model.ps>.

Machaca, K., and H. C. Hartzell. 1998. *Biophys. J.* 74:1286–1295. The authors failed to mention the following in their published manuscript:

The Ca-activated Cl currents studied in this paper physiologically important as they are likely responsible for the fertilization potential that provides a fast block to polyspermy in *Xenopus* eggs (Jaffe et al. 1983; Kline and Nuccitelli, 1985; Webb and Nuccitelli, 1985). Sperm-egg fusion stimulates IP3 production (Snow et al., 1996) and Ca release from stores followed by the activation of the Cl currents (Busa and Nuccitelli, 1985; Kline, 1987). Furthermore, Kline and Nuccitelli (1995) have used the extracellular vibrating probe to show that the Cl current in *Xenopus* eggs is 6–7 times more enriched in the animal versus vegetal pole. This distribution is similar to the results we report herein for IC11 and IC12.

Busa, W. B., and R. Nuccitelli. 1985. An elevated free cytosolic Ca^{2+} wave follows fertilization in eggs of the frog, *Xenopus laevis*. *J. Cell Biol.* 100:1325–1329.

Jaffe, L. A., N. L. Cross, and B. Picheral. 1983. Studies of the voltage-dependent polyspermy block using cross-species fertilization of amphibians. *Dev. Biol.* 98:319–326.

Kline, D., and R. Nuccitelli. 1985. The wave of activation current in the *Xenopus* egg. *Dev. Biol.* 111:471–487.

Kline, D. 1987. Calcium-dependent events at fertilization of the frog egg: injection of calcium buffer blocks ion channel opening, exocytosis and formation of pronuclei. *Dev. Biol.* 126:346–361.

Snow, P., D. L. Yim, J. D. Leibow, S. Saini, and R. Nuccitelli. 1996. Fertilization stimulates an increase in inositol triphosphate and inositol lipid levels in *Xenopus* eggs. *Dev. Biol.* 180:108–118.

Webb, D., and R. Nuccitelli. 1985. Fertilization potential and electrical properties of the *Xenopus laevis* egg. *Dev. Biol.* 107:395–406.